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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,604	11/25/2003	Seiichi Kawano	JP92000184US3 (4135P)	5620
stic) 7500 000902009 LENOVO (UNITED STATES) INC. c/o Sawyer Law Group LLP 2405 E. Bayshore Road Suite No. 406 PALO ALTO, CA 94303			EXAMINER	
			PIZIALI, JEFFREY J	
			ART UNIT	PAPER NUMBER
			2629	
			NOTIFICATION DATE	DELIVERY MODE
			03/09/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent@sawyerlawgroup.com

Application No. Applicant(s) 10/721.604 KAWANO, SEIICHI Office Action Summary Examiner Art Unit Jeff Piziali 2629 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 12 December 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-19 is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-19 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 25 November 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No. 09/938,221. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/S6/08) 5) Notice of Informal Patent Application Paper No(s)/Mail Date 9/10/08 6) Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10 September 2008 has been entered.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35
 U.S.C. 119(a)-(d). The certified copy has been filed in parent *Application No. 09/938,221*, filed on 23 August 2001.

Drawings

3. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the figures. Application/Control Number: 10/721,604 Page 3

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Specification

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

 Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claim 1 recites, "the window brightness in the particular window is determined based on the draw signal and is not based on sensing physical output of the display unit" (lines 8-9).

This "not based on sensing physical output of the display unit" subject matter is not found in the original disclosure of the invention.

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Claim 3 recites, "the area brightness in a specific area determined based on a draw signal issued to the liquid crystal display screen and not based on sensing physical output of the liquid crystal display unit" (lines 8-10).

This "not based on sensing physical output of the liquid crystal display unit" subject matter is not found in the original disclosure of the invention.

Claim 9 recites, "decreasing the screen brightness responsive to the determined window brightness being high relative to a predetermined standard."

This "predetermined standard" subject matter is not found in the original disclosure of the invention.

Claim 10 recites, "increasing the screen brightness responsive to the determined window brightness being low relative to a predetermined standard."

This "predetermined standard" subject matter is not found in the original disclosure of the invention.

Claim 11 recites, "the window brightness is not determined using a sensor to physically sense a physical output of the screen or to physically sense an output of the back-light."

This "not determined using a sensor to physically sense a physical output of the screen or to physically sense an output of the back-light" subject matter is not found in the original disclosure of the invention

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Claim 16 recites, "decreasing the brightness of the back-light responsive to the determined area brightness being high relative to a predetermined standard."

This "predetermined standard" subject matter is not found in the original disclosure of the invention

Claim 17 recites, "increasing the brightness of the back-light responsive to the determined area brightness being low relative to a predetermined standard."

This "predetermined standard" subject matter is not found in the original disclosure of the invention

Claim 18 recites, "the area brightness is not determined using a sensor to physically sense a physical output of the liquid crystal display screen or to physically sense an output of the back-light."

This "not determined using a sensor to physically sense a physical output of the liquid crystal display screen or to physically sense an output of the back-light" subject matter is not found in the original disclosure of the invention.

 Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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Claim 1 recites, "the window brightness in the particular window is determined based on the draw signal and is not based on sensing physical output of the display unit" (lines 8-9).

This "not based on sensing physical output of the display unit" subject matter is not enabled by the original disclosure of the invention.

Claim 3 recites, "the area brightness in a specific area determined based on a draw signal issued to the liquid crystal display screen and not based on sensing physical output of the liquid crystal display unit" (lines 8-10).

This "not based on sensing physical output of the liquid crystal display unit" subject matter is not enabled by the original disclosure of the invention.

Claim 9 recites, "decreasing the screen brightness responsive to the determined window brightness being high relative to a predetermined standard."

This "predetermined standard" subject matter is not enabled by the original disclosure of the invention.

Claim 10 recites, "increasing the screen brightness responsive to the determined window brightness being low relative to a predetermined standard."

This "predetermined standard" subject matter is not enabled by the original disclosure of the invention.

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Claim 11 recites, "the window brightness is not determined using a sensor to physically sense a physical output of the screen or to physically sense an output of the back-light."

This "not determined using a sensor to physically sense a physical output of the screen or to physically sense an output of the back-light" subject matter is not enabled by the original disclosure of the invention.

Claim 16 recites, "decreasing the brightness of the back-light responsive to the determined area brightness being high relative to a predetermined standard."

This "predetermined standard" subject matter is not enabled by the original disclosure of the invention.

Claim 17 recites, "increasing the brightness of the back-light responsive to the determined area brightness being low relative to a predetermined standard."

This "predetermined standard" subject matter is not enabled by the original disclosure of the invention

Claim 18 recites, "the area brightness is not determined using a sensor to physically sense a physical output of the liquid crystal display screen or to physically sense an output of the back-light."

This "not determined using a sensor to physically sense a physical output of the liquid crystal display screen or to physically sense an output of the back-light" subject matter is not enabled by the original disclosure of the invention. Art Unit: 2629

 The remaining claims are rejected under 35 U.S.C. 112, first paragraph, as being dependent upon rejected base claims.

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 10. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 11. Claim 1 recites the limitation "the arithmetic operation executed by the processor" (line
- 3). There is insufficient antecedent basis for this limitation in the claim. For example:

The claim earlier recites, "a processor for executing an arithmetic operation" (line 2).

Such "for executing" subject matter serves only as an intended use. There is no antecedent basis for the "the arithmetic operation" actually being "executed."

12. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "the processor executes the following processings..." (line 4). For example:

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To the best of the examiner's knowledge, "processings" is not a word. The word is not locatable in any dictionary available to the examiner.

It would be unclear to one having ordinary skill in the art what claim limitations, if any, comprise the recited "following processings."

13. Claim 1 provides for "the draw signal used to control the display unit to display the particular window" (line 7), but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example Ex parte Dunki, 153 USPQ 678 (Bd.App. 1967) and Clinical Products, Ltd. v. Brenner, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

14. Claim 1 recites the limitation "physical output" (line 9). The lack of a grammatical article (such as "a" or "a plurality of" or "the" or "said") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.

For example, it would be unclear to an artisan whether the claimed "display unit" does or does not have a "physical output."

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15. Claim 1 is amenable to two or more plausible claim constructions.

The use of the phrase "not based on sensing physical output of the display unit" (line 9) renders the claim indefinite.

The claimed "physical output" is amenable to two plausible definitions.

Based on the description provided in the Specification, "physical output" could be interpreted to mean:

- (a) An output of matter.
- (b) An output of energy.
- (c) An output terminal.

Thus, neither the Specification, nor the claims, nor the ordinary meanings of the words provides any guidance as to what Applicant intends to cover with this claim language.

Due to the ambiguity as to what is intended by the claimed "physical output" and the fact that this claim element is amenable to two or more plausible claim constructions, this claim is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicant considers to be the invention.

See Ex parte Miyazaki (BPAI Precedential 19 November 2008).

16. Claim 2 provides for "the processor controls the display unit with use of the power management function" (line 3), but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim

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is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 2 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example Ex parte Dunki, 153 USPQ 678 (Bd.App. 1967) and Clinical Products, Ltd. v. Brenner, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

17. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP 8 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter:
"the brightness controller executes the following processings..." (line 5). For example:

To the best of the examiner's knowledge, "processings" is not a word. The word is not locatable in any dictionary available to the examiner.

It would be unclear to one having ordinary skill in the art what claim limitations, if any, comprise the recited "following processings."

An omitted structural cooperative relationship results from the claimed subject matter: "a specific area" (line 7) and "a specific area" (line 8). For example:

It would be unclear to one having ordinary skill in the art whether the limitations are intended to be distinct from, or identical to, one another. Application/Control Number: 10/721,604 Page 12

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18. Claim 3 recites the limitation "physical output" (line 9). The lack of a grammatical article

(such as "a" or "a plurality of" or "the" or "said") preceding the limitation renders it unclear

whether the claim is establishing a new element; or instead referring back to some preestablished

limitation.

For example, it would be unclear to an artisan whether the claimed "liquid crystal display

unit" does or does not have a "physical output."

Claim 3 is amenable to two or more plausible claim constructions.

The use of the phrase "not based on sensing physical output of the liquid crystal display

unit" (line 9) renders the claim indefinite.

The claimed "physical output" is amenable to two plausible definitions.

Based on the description provided in the Specification, "physical output" could be

interpreted to mean:

(a) An output of matter.

(b) An output of energy.

(c) An output terminal.

Thus, neither the Specification, nor the claims, nor the ordinary meanings of the words

provides any guidance as to what Applicant intends to cover with this claim language.

Due to the ambiguity as to what is intended by the claimed "physical output" and the fact

that this claim element is amenable to two or more plausible claim constructions, this claim is

rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicant considers to be the invention.

See Ex parte Miyazaki (BPAI Precedential 19 November 2008).

 Claim 3 provides for "the draw signal used to control the liquid crystal display screen to display an image in the specific area" (line 10), but, since the claim does not set forth any steps

involved in the method/process, it is unclear what method/process applicant is intending to

encompass. A claim is indefinite where it merely recites a use without any active, positive steps

delimiting how this use is actually practiced.

Claim 3 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without

setting forth any steps involved in the process, results in an improper definition of a process, i.e.,

results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example Ex

 $parte\ Dunki,\ 153\ USPQ\ 678\ (Bd.App.\ 1967)\ and\ Clinical\ Products,\ Ltd.\ v.\ Brenner,\ 255\ F.$

Supp. 131, 149 USPQ 475 (D.D.C. 1966).

21. Claim 3 recites the limitation "the specific area" (line 11). There is insufficient

antecedent basis for this limitation in the claim.

22. Claim 5 recites the limitation "each color" (line 2). There is insufficient antecedent basis

for this limitation in the claim.

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- 23. Claim 5 recites the limitation "the window brightness of the particular window" (line 3).
 There is insufficient antecedent basis for this limitation in the claim.
- Claim 9 recites the limitation "changing the screen brightness" (line 1). There is insufficient antecedent basis for this limitation in the claim.
- 25. The term "high" in claim 9 (line 2) is a relative term which renders the claim indefinite.
 The term "high" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.
- 26. Claim 9 is indefinite where it specifies "a predetermined standard" (line 3), since "predetermined," according to applicant's definition, merely means "determined beforehand."
 For example, see Joseph E. Seagram & Sons, Inc. V. Marzall, Comr. Pats., 84 USPQ 180 (Court of Appeals, District of Columbia).
- Claim 10 recites the limitation "changing the screen brightness" (line 1). There is insufficient antecedent basis for this limitation in the claim.
- 28. The term "low" in claim 10 (line 2) is a relative term which renders the claim indefinite.
 The term "low" is not defined by the claim, the specification does not provide a standard for

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ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the score of the invention.

- 29. Claim 10 is indefinite where it specifies "a predetermined standard" (line 3), since "predetermined," according to applicant's definition, merely means "determined beforehand." For example, see Joseph E. Seagram & Sons, Inc. V. Marzall, Comr. Pats., 84 USPQ 180 (Court of Appeals, District of Columbia).
- 30. Claim 11 provides for "the window brightness is not determined using a sensor to physically sense a physical output of the screen or to physically sense an output of the backlight," but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 11 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example Ex parte Dunki, 153 USPQ 678 (Bd.App. 1967) and Clinical Products, Ltd. v. Brenner, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim 11 is amenable to two or more plausible claim constructions.

The use of the phrase "physically sense" (line 2) renders the claim indefinite.

The claimed "physically sense" is amenable to two plausible definitions.

Based on the description provided in the Specification, "physically sense" could be interpreted to mean:

- (a) Sense matter.
- (b) Sense energy.
- (c) Sense anything.

Thus, neither the Specification, nor the claims, nor the ordinary meanings of the words provides any guidance as to what Applicant intends to cover with this claim language.

Due to the ambiguity as to what is intended by the claimed "physically sense" and the fact that this claim element is amenable to two or more plausible claim constructions, this claim is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicant considers to be the invention.

See Ex parte Miyazaki (BPAI Precedential 19 November 2008).

32. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "a physical output" (claim 1, line 9) and "a physical output" (claim 11, line 2). For example:

It would be unclear to one having ordinary skill in the art whether the limitations are intended to be distinct from, or identical to, one another. An omitted structural cooperative relationship results from the claimed subject matter:

"not determined using a sensor to physically sense a physical output of the screen or to

physically sense an output of the back-light" (claim 11, lines 2-3).

For example, it would be unclear to an artisan whether the claimed "back-light" does or does not have an "output."

33. Claim 11 is amenable to two or more plausible claim constructions.

The use of the phrase "physical output" (line 2) renders the claim indefinite.

The claimed "physical output" is amenable to two plausible definitions.

Based on the description provided in the Specification, "physical output" could be interpreted to mean:

- (a) An output of matter.
- (b) An output of energy.
- (c) An output terminal.

Thus, neither the Specification, nor the claims, nor the ordinary meanings of the words provides any guidance as to what Applicant intends to cover with this claim language.

Due to the ambiguity as to what is intended by the claimed "physical output" and the fact that this claim element is amenable to two or more plausible claim constructions, this claim is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicant considers to be the invention.

See Ex parte Miyazaki (BPAI Precedential 19 November 2008).

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- Claim 11 recites the limitation "the back-light" (line 3). There is insufficient antecedent basis for this limitation in the claim.
- 35. Claim 12 recites the limitation "focus" (in line 2). The lack of a grammatical article (such as "a" or "a plurality of" or "the" or "said") preceding the limitation renders it unclear whether

the claim is establishing a new element; or instead referring back to some preestablished

limitation.

36. Claim 12 recites the limitation "the detection" (line 2). There is insufficient antecedent

basis for this limitation in the claim.

37. Claim 14 recites the limitation "each color" (line 3). There is insufficient antecedent

basis for this limitation in the claim.

38. Claim 14 recites the limitation "the area brightness of the specific area" (line 3). There

is insufficient antecedent basis for this limitation in the claim.

39. Claim 15 recites the limitation "the brightness" (line 1). There is insufficient antecedent

basis for this limitation in the claim.

40. The term "high" in claim 16 (line 3) is a relative term which renders the claim indefinite.

The term "high" is not defined by the claim, the specification does not provide a standard for

ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

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- 41. Claim 16 is indefinite where it specifies "a predetermined standard" (line 3), since "predetermined," according to applicant's definition, merely means "determined beforehand." For example, see Joseph E. Seagram & Sons, Inc. V. Marzall, Comr. Pats., 84 USPO 180 (Court of Appeals, District of Columbia).
- 42 The term "low" in claim 17 (line 3) is a relative term which renders the claim indefinite. The term "low" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.
- 43 Claim 17 is indefinite where it specifies "a predetermined standard" (line 3), since "predetermined," according to applicant's definition, merely means "determined beforehand." For example, see Joseph E. Seagram & Sons, Inc. V. Marzall, Comr. Pats., 84 USPO 180 (Court of Appeals, District of Columbia).
- 44 Claim 18 provides for "the area brightness is not determined using a sensor to physically sense a physical output of the liquid crystal display screen or to physically sense an output of the back-light," but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it

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merely recites a use without any active, positive steps delimiting how this use is actually

practiced.

Claim 18 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without

setting forth any steps involved in the process, results in an improper definition of a process, i.e.,

results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example Ex

parte Dunki, 153 USPQ 678 (Bd.App. 1967) and Clinical Products, Ltd. v. Brenner, 255 F.

Supp. 131, 149 USPQ 475 (D.D.C. 1966).

45. Claim 18 is amenable to two or more plausible claim constructions.

The use of the phrase "physically sense" (lines 2 & 3) renders the claim indefinite.

The claimed "physically sense" is amenable to two plausible definitions.

Based on the description provided in the Specification, "physically sense" could be

interpreted to mean:

- (a) Sense matter.
- (b) Sense energy.
- (c) Sense anything.

Thus, neither the Specification, nor the claims, nor the ordinary meanings of the words

provides any guidance as to what Applicant intends to cover with this claim language.

Due to the ambiguity as to what is intended by the claimed "physically sense" and the

fact that this claim element is amenable to two or more plausible claim constructions, this claim

is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly

point out and distinctly claim the subject matter that the Applicant considers to be the invention.

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See Ex parte Miyazaki (BPAI Precedential 19 November 2008).

46. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "a physical output" (claim 3, line 9) and "a physical output" (claim 18, line 2). For example:

It would be unclear to one having ordinary skill in the art whether the limitations are intended to be distinct from, or identical to, one another.

An omitted structural cooperative relationship results from the claimed subject matter:
"not determined using a sensor to physically sense a physical output of the liquid crystal
display screen or to physically sense an output of the back-light" (claim 18, lines 2-3).

For example, it would be unclear to an artisan whether the claimed "back-light" does or does not have an "output."

47. Claim 18 is amenable to two or more plausible claim constructions.

The use of the phrase "physical output" (line 2) renders the claim indefinite.

The claimed "physical output" is amenable to two plausible definitions.

Based on the description provided in the Specification, "physical output" could be interpreted to mean:

(a) An output of matter.

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(b) An output of energy.

(c) An output terminal.

Thus, neither the Specification, nor the claims, nor the ordinary meanings of the words provides any guidance as to what Applicant intends to cover with this claim language.

Due to the ambiguity as to what is intended by the claimed "physical output" and the fact that this claim element is amenable to two or more plausible claim constructions, this claim is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicant considers to be the invention.

See Ex parte Mivazaki (BPAI Precedential 19 November 2008).

48. Claim 19 recites the limitation "the image" (line 2). There is insufficient antecedent basis for this limitation in the claim.

- 49. Claim 19 recites the limitation "focus" (in line 2). The lack of a grammatical article (such as "a" or "a plurality of" or "the" or "said") preceding the limitation renders it unclear whether the claim is establishing a new element; or instead referring back to some preestablished limitation.
- Claim 19 recites the limitation "the determination" (line 2). There is insufficient antecedent basis for this limitation in the claim.

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 The remaining claims are rejected under 35 U.S.C. 112, second paragraph, as being dependent upon rejected base claims.

52. The claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

As a courtesy to the Applicant, the examiner has attempted to also make rejections over prior art -- based on the examiner's best guess interpretations of the invention that the Applicant is intending to claim.

However, the indefinite nature of the claimed subject matter naturally hinders the Office's ability to search and examine the application.

Any instantly distinguishing features and subject matter that the Applicant considers to be absent from the cited prior art is more than likely a result of the indefinite nature of the claims.

The Applicant is respectfully requested to correct the indefinite nature of the claims, which should going forward result in a more precise search and examination.

Claim Rejections - 35 USC § 103

- 53. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 54. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(c), (f) or (g) prior art under 35 U.S.C. 103(a).

55. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Megied et al (US 6,556,253 B1) in view of Kidder (US 5,822,599 A) and Evanicky et al (US 6,611,249 B1).

Regarding claim 1, *Megied* discloses a computer system [e.g., Fig. 2], comprising: a processor [e.g., Fig. 2: 400] for executing an arithmetic operation; and a display unit [e.g., Fig. 2: 120, 120] for displaying a result of the arithmetic operation

the processor executes the following processings:

executed by the processor; wherein

determining a window brightness in a particular window [e.g., Fig. 1A: W1-W4] displayed on a screen of the display unit, wherein

the window brightness is determined by monitoring a draw signal issued to the display unit,

the draw signal used to control the display unit to display the particular window (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59), wherein the window brightness in the particular window is determined based on the draw signal and

is not based on sensing physical output of the display unit; and

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controlling the display unit so as to change a screen brightness of the display unit according to the determined window brightness in the particular window (see the entire document, including the Abstract and Column 1, Line 15 - Column 2, Line 17).

Should it be shown that **Megied** teaches the intended "change a screen brightness of the display unit" subject matter with insufficient specificity:

Regarding claim 1, *Kidder* discloses a computer system [e.g., Fig. 2: 202], comprising: a processor [e.g., Fig. 2: 208, 224] for executing an arithmetic operation; and a display unit [e.g., Fig. 2: 204] for displaying a result of the arithmetic operation executed by the processor; wherein

the processor executes the following processings:

determining a window brightness in a particular window [e.g., Fig. 1: 102] displayed on a screen of the display unit, wherein

the window brightness is determined by monitoring a draw signal issued to the display unit,

the draw signal used to control the display unit to display the particular window (see the entire document, including the Abstract and Column 2, Line 1 - Column 4, Line 3), wherein the window brightness in the particular window is determined based on the draw signal and

is not based on sensing physical output of the display unit; and

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controlling the display unit so as to change a screen brightness of the display unit according to the determined window brightness in the particular window (see the entire document, including Column 4, Line 4 - Column 5, Line 27).

Megied and Kidder are analogous art, because they are from the shared inventive field of display brightness adjustment systems. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to display Kidder's application programs in Megied's windows, so as to provide brightness adjustment control while displaying well known, commercially popular window applications.

Should it be shown that neither *Megied* nor *Kidder* teaches the intended "display unit" subject matter with insufficient specificity:

Regarding claim 1, Evanicky discloses a computer system [e.g., Fig. 1: 10], comprising: a processor [e.g., Fig. 1: 12] for executing an arithmetic operation (see the entire document, including Column 6, Line 15 - Column 7, Line 12); and

a display unit [e.g., Fig. 9: 216] for displaying a result of the arithmetic operation executed by the processor (see the entire document, including Column 7, Lines 15-56); wherein the processor executes the following processings:

determining a window brightness in a particular window [e.g., Fig. 17: 1140] displayed on a screen of the display unit, wherein

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and

the window brightness is determined by monitoring a draw signal [e.g., light signal] issued to the display unit,

the draw signal used to control the display unit to display the particular window, wherein the window brightness in the particular window is determined based on the draw signal

is not based on sensing physical [e.g., light is not considered "physical" or "material"]
output of the display unit; and

controlling the display unit so as to change a screen brightness of the display unit according to the determined window brightness in the particular window (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Megied, Kidder, and Evanicky are analogous art, because they are from the shared inventive field of display brightness adjustment systems. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use Evanicky liquid crystal display with the combined invention of Kidder and Megied, so as to provide brightness adjustment control over a well known and commercially popular type of display.

Regarding claim 2, *Megied* discloses the processor is controlled by an operating system having a power management function and wherein

the processor controls the display unit with use of the power management function of the operating system so as to change the screen brightness of the display unit (see the entire document, including the Abstract and Column 1, Line 15 - Column 2, Line 17).

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Regarding claim 2, *Kidder* discloses the processor is controlled by an operating system [e.g., Fig. 2: 218] having a power management function [e.g., Fig. 3: 304] and wherein

the processor controls the display unit with use of the power management function of the operating system so as to change the screen brightness of the display unit (see the entire document, including the Abstract and Column 2, Line 1 - Column 4, Line 3).

Regarding claim 2, Evanicky discloses the processor is controlled by an operating system (see the entire document, including Column 19, Lines 58-67) having a power management function and wherein

the processor controls (see the entire document, including Column 12, Lines 38-55) the display unit with use of the power management function of the operating system so as to change the screen brightness of the display unit (see the entire document, including Column 15, Lines 42-58).

Regarding claim 3, this claim is rejected by the reasoning applied in rejecting claim 1; furthermore, *Megied* discloses a liquid crystal display unit [e.g., Fig. 2: 120] (see the entire document, including Column 2, Lines 5-11), comprising:

a liquid crystal display screen;

a brightness controller [e.g., Fig. 2: 117] a brightness controller for controlling a brightness of the liquid crystal display screen; wherein

the brightness controller executes the following processings:

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receiving a brightness control signal generated based on a determined area brightness in a specific area [e.g., Fig. 1A: W1-W4] displayed on a subsection of the liquid crystal display screen (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59),

the area brightness in a specific area [e.g., Fig. 1A: W1-W4] determined based on a draw signal issued to the liquid crystal display screen and

not based on sensing physical output of the liquid crystal display unit,

the draw signal used to control the liquid crystal display screen to display an image in the specific area,

the image being selected from a plurality of images to be displayed on the liquid crystal display screen; and

changing the brightness of the liquid crystal display unit according to the brightness control signal (see the entire document, including the Abstract and Column 1, Line 15 - Column 2, Line 17).

Should it be shown that *Megied* teaches the intended "changing the brightness" subject matter with insufficient specificity:

Regarding claim 3, this claim is rejected by the reasoning applied in rejecting claim 1; furthermore, *Kidder* discloses a display unit, comprising:

a display screen [e.g., Fig. 2: 204];

a brightness controller [e.g., Fig. 2: 208, 224] for controlling a brightness of the display screen; wherein

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the brightness controller executes the following processings:

receiving a brightness control signal generated based on a determined area brightness in a specific area [e.g., Fig. 1: 102] displayed on a subsection of the display screen (see the entire document, including the Abstract and Column 2, Line 1 - Column 4, Line 3),

the area brightness in a specific area determined based on a draw signal issued to the display screen and

not based on sensing physical output of the display unit,

the draw signal used to control the display screen to display an image in the specific area, the image being selected from a plurality of images to be displayed on the display screen; and

changing the brightness of the display unit according to the brightness control signal (see the entire document, including Column 4, Line 4 - Column 5, Line 27).

Megied and Kidder are analogous art, because they are from the shared inventive field of display brightness adjustment systems. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to display Kidder's application programs in Megied's windows, so as to provide brightness adjustment control while displaying well known, commercially popular window applications.

Should it be shown that neither *Megied* nor *Kidder* teaches the intended "display unit" subject matter with insufficient specificity:

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Regarding claim 3, this claim is rejected by the reasoning applied in rejecting claim 1; furthermore, *Evanicky* discloses a liquid crystal display unit [e.g., Fig. 9: 216], comprising:

a liquid crystal display screen [e.g., Figs. 2, 3, and 17; 210] (see the entire document, including Column 7, Line 57 - Column 10, Line 14);

a back-light [e.g., Fig. 3; 132, 136] for lighting the liquid crystal display screen (see the entire document, including Column 7, Lines 15-56); and

a brightness controller [e.g., Fig. 1; 12] for controlling a brightness of the back-light (see the entire document, including Column 7, Lines 15-56); wherein

the brightness controller executes the following processings:

receiving a brightness control signal [e.g., Fig. 14D; 800] generated based on a determined area brightness in a specific area [e.g., Fig. 17; 1140] displayed on a subsection of the liquid crystal display screen (see the entire document, including Column 19, Line 48 - Column 20, Line 24),

the area brightness in a specific area determined based on a draw signal [e.g., light signal] issued to the liquid crystal display screen and

not based on sensing physical output [e.g., light is not considered "physical" or "material"] of the liquid crystal display unit,

the draw signal used to control the liquid crystal display screen to display an image in the specific area,

the image being selected from a plurality of images to be displayed on the liquid crystal display screen; and

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changing the brightness [e.g., Fig. 16; 1060] of the back-light according to the brightness control signal (see the entire document, including Column 18, Line 30 - Column 19, Line 47).

Megied, Kidder, and Evanicky are analogous art, because they are from the shared inventive field of display brightness adjustment systems. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use Evanicky liquid crystal display with the combined invention of Kidder and Megied, so as to provide brightness adjustment control over a well known and commercially popular type of display.

Regarding claim 4, Megied discloses the window brightness in the particular window is determined based on at least one numerical parameter in the draw signal (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

Regarding claim 4, Kidder discloses the window brightness in the particular window is determined based on at least one numerical parameter in the draw signal (see the entire document, including the Abstract and Column 2, Line 1 - Column 4, Line 3).

Regarding claim 4, Evanicky discloses the window brightness in the particular window is determined based on at least one numerical parameter in the draw signal (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

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Regarding claim 5, *Megied* discloses determining the window brightness includes determining, from the at least one numerical parameter in the draw signal, each color displayed in the particular window, wherein

the window brightness of the particular window is determined from said each color (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

Regarding claim 5, *Evanicky* discloses determining the window brightness includes determining, from the at least one numerical parameter in the draw signal, each color displayed in the particular window, wherein

the window brightness of the particular window is determined from said each color (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Regarding claim 6, Megied discloses the window brightness is determined from said each color displayed in the particular window by converting said each color to an associated gray scale value (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

Regarding claim 6, Evanicky discloses the window brightness is determined from said each color displayed in the particular window by converting said each color to an associated gray scale value (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

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Regarding claim 7, *Megied* discloses the particular window is displayed on a subsection of the screen, and

the screen brightness is the brightness of an entirety of the screen (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

Regarding claim 7, Kidder discloses the particular window is displayed on a subsection of the screen, and

the screen brightness is the brightness of an entirety of the screen (see the entire document, including the Abstract and Column 2, Line 1 - Column 4, Line 3).

Regarding claim 7, Evanicky discloses the particular window is displayed on a subsection of the screen, and

the screen brightness is the brightness of an entirety of the screen (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Regarding claim 8, Evanicky discloses the screen brightness is controlled by a back-light of the display unit (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Regarding claim 9, Megied discloses changing the screen brightness includes decreasing the screen brightness responsive to the determined window brightness being high relative to a

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predetermined standard (see the entire document, including the Abstract and Column 2, Line 58 - Column 4. Line 59).

Regarding claim 9, *Kidder* discloses changing the screen brightness includes decreasing the screen brightness responsive to the determined window brightness being high relative to a predetermined standard (see the entire document, including the Abstract and Column 2, Line 1 - Column 4, Line 3).

Regarding claim 9, *Evanicky* discloses changing the screen brightness includes decreasing the screen brightness responsive to the determined window brightness being high relative to a predetermined standard (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Regarding claim 10, Megied discloses changing the screen brightness includes increasing the screen brightness responsive to the determined window brightness being low relative to a predetermined standard (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

Regarding claim 10, *Kidder* discloses changing the screen brightness includes increasing the screen brightness responsive to the determined window brightness being low relative to a predetermined standard (see the entire document, including the Abstract and Column 2, Line 1 - Column 4, Line 3).

Regarding claim 10, Evanicky discloses changing the screen brightness includes increasing the screen brightness responsive to the determined window brightness being low relative to a predetermined standard (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Regarding claim 11, Megied discloses the window brightness is not determined using a sensor to physically sense a physical output of the screen or

to physically sense an output of the back-light (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

Regarding claim 11, *Kidder* discloses the window brightness is not determined using a sensor to physically sense a physical output of the screen or

to physically sense an output of the back-light (see the entire document, including the Abstract and Column 2, Line 1 - Column 4, Line 3).

Regarding claim 11, Evanicky discloses the window brightness is not determined using a sensor to physically sense a physical output [e.g., light is not considered "physical" or "material"] of the screen or

to physically sense an output of the back-light (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

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Regarding claim 12, Megied discloses the particular window is an active window, the active window having focus during the detection of the window brightness and being selected from a plurality of windows displayed on the screen, wherein only the active window has said focus (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

Regarding claim 12, Kidder discloses the particular window is an active window, the active window having focus during the detection of the window brightness and being selected from a plurality of windows displayed on the screen, wherein only the active window has said focus (see the entire document, including the Abstract and Column 2, Line 1 - Column 4, Line 3).

Regarding claim 12, Evanicky discloses the particular window is an active window, the active window having focus during the detection of the window brightness and being selected from a plurality of windows displayed on the screen, wherein only the active window has said focus (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Regarding claim 13, *Megied* discloses the area brightness in the specific area is determined based on at least one numerical parameter in the draw signal (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

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Regarding claim 13, Kidder discloses the area brightness in the specific area is determined based on at least one numerical parameter in the draw signal (see the entire document, including the Abstract and Column 2, Line 1 - Column 4, Line 3).

Regarding claim 13, Evanicky discloses the area brightness in the specific area is determined based on at least one numerical parameter in the draw signal (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Regarding claim 14, *Megied* discloses the area brightness is determined from the draw signal by determining, from the at least one numerical parameter in the draw signal, each color displayed in the specific area, and

determining the area brightness of the specific area from said each color (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

Regarding claim 14, *Evanicky* discloses the area brightness is determined from the draw signal by determining, from the at least one numerical parameter in the draw signal, each color displayed in the specific area, and

determining the area brightness of the specific area from said each color (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Regarding claim 15, *Megied* discloses the brightness is determined from said each color displayed in the specific area by converting said each color to an associated gray scale value (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

Regarding claim 15, Evanicky discloses the brightness is determined from said each color displayed in the specific area by converting said each color to an associated gray scale value (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Regarding claim 16, this claim is rejected by the reasoning applied in rejecting claim 9; furthermore, *Evanicky* discloses changing the brightness of the back-light includes decreasing the brightness of the back-light responsive to the determined area brightness being high relative to a predetermined standard (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Regarding claim 17, this claim is rejected by the reasoning applied in rejecting claim 10; furthermore, *Evanicky* discloses changing the brightness of the back-light includes increasing the brightness of the back-light responsive to the determined area brightness being low relative to a predetermined standard (*see the entire document, including Column 18, Line 30 - Column 20, Line 24*).

Regarding claim 18, Megied discloses the area brightness is not determined using a sensor to physically sense a physical output of the liquid crystal display screen or

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to physically sense an output of the back-light (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

Regarding claim 18, *Kidder* discloses the area brightness is not determined using a sensor to physically sense a physical output of the liquid crystal display screen or

to physically sense an output of the back-light (see the entire document, including the Abstract and Column 2, Line 1 - Column 4, Line 3).

Regarding claim 18, Evanicky discloses the area brightness is not determined using a sensor to physically sense a physical output [e.g., light is not considered "physical" or "material"] of the liquid crystal display screen or

to physically sense an output of the back-light (see the entire document, including Column 18, Line 30 - Column 20, Line 24).

Regarding claim 19, *Megied* discloses the plurality of images are a plurality of windows, the image being an active window,

the active window having focus during the determination of the area brightness and being selected from the plurality of images, wherein

only the active window has said focus (see the entire document, including the Abstract and Column 2, Line 58 - Column 4, Line 59).

Regarding claim 19, Kidder discloses the plurality of images are a plurality of windows,

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the image being an active window,

the active window having focus during the determination of the area brightness and

being selected from the plurality of images, wherein

only the active window has said focus (see the entire document, including the Abstract

and Column 2, Line 1 - Column 4, Line 3).

Regarding claim 19, *Evanicky* discloses the plurality of images are a plurality of windows.

the image being an active window,

the active window having focus during the determination of the area brightness and

being selected from the plurality of images, wherein

only the active window has said focus (see the entire document, including Column 18,

Line 30 - Column 20, Line 24).

Response to Arguments

 Applicant's arguments filed 12 December 2008 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

By such reasoning, rejection of the claims is deemed necessary, proper, and thereby maintained at this time. Application/Control Number: 10/721,604 Page 42

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Conclusion

57. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The documents listed on the attached 'Notice of References Cited' are cited to further evidence the state of the art pertaining to computer systems and liquid crystal display units.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571)272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Piziali/ Primary Examiner, Art Unit 2629 27 February 2009